

FEASIBILITY DEMONSTRATION OF A THERMAL SWITCH
FOR DUAL TEMPERATURE IR FOCAL PLANE COOLING, D. L.
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Angeles, CA 90009 - A feasibility demonstration will be performed
examining the potential to provide passive backup cooling for an infrared
detector focal plane array in the cryocooler-off mode. The primary cooling
mode for the focal plane is with a 60 K cryocooler. However in the
cryocooler-off mode, a backup cryogenic radiator operating at a higher
temperature would couple with the focal plane to ensure continuous, albeit
different, infrared sensing capabilities. The focal plane is directly coupled to
the cryocooler, and indirectly coupled to the cryogenic radiator through a
thermal switch.

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